

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004983**Date Inspected:** 11-Dec-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

The Quality Assurance (QA) Inspector Gregory Bertlesman arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following.

East Shaft, Lift 1

The Quality Assurance Inspector was informed ZPMC was continuing to weld the fit-lug to diaphragm fillet weld connections. ZPMC was utilizing the flux cored arc welding process to produce the fillet welds in the vertical position. ZPMC has removed temporary attachments "dogs" prior to completing the fit-lug to diaphragm fillet weld connection at numerous diaphragm plates attached at skin "C". The procedure requires the root pass to pass to be tested by the magnetic particle method and for the temporary attachments to remain in place until the weld is completed and cooled to ambient temperature. Mr. Walton informed QA that ZPMC failed to perform the magnetic particle testing of the root pass. An NCR was generated pertaining to the discrepancy.

South Shaft, Skin C, Lift 2

The Quality Assurance Inspector observed ZPMC performing heat straightening operations to the skin plate. A ZPMC Quality Control Inspector was present monitoring the temperature utilizing an infra-red temperature indicating device.

South Shaft, Skin D, Lift 2

The Quality Assurance Inspector performed a visual verification for the ABF internal green tagging system of the South Shaft, Skin D, Lift 2. It was observed that ZPMC is continuing to grind undercut up to a millimeter even

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though AWS D1.5 states undercut shall be repaired by welding. Assistant Structures Materials Representative Josh Ishibashi is aware of the issue and has instructed the Quality Assurance inspectors to find the issue compliant as long as it is not ground over a millimeter. The Quality Assurance Inspector observed numerous areas in need of repair by welding. ZPMC agreed and immediately repaired the discrepancies. The Quality Assurance Inspector signed the green tag paperwork and logged the progress in an on-site for future review.

South Shaft, Skin A, Lift 2

The Quality Assurance Inspector observed ZPMC in the process of erecting the 68M Diaphragm plate to skin A.

Summary of Conversations:

As stated in the contents of the above report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Josh Ishibashi 1.376.647.10411, who represents the Office of Structural Materials for your project.

Inspected By:	Bertlesman,Greg	Quality Assurance Inspector
Reviewed By:	Wright,Mark	QA Reviewer
